REMARKS

In the Office Action the Examiner noted that claims 1-42 were pending in the application and the Examiner rejected all claims. By this Amendment, various claims have been amended. Thus, claims 1-42 remain pending in the application. The Examiner's rejections are traversed below.

The Current Rejection

In the Office Action the Examiner has withdrawn the previous prior art rejections and now rejects all claims as unpatentable over U.S. Patent 5,739,596 to Takizawa et al. in view of U.S. Patent 6,272,642 to Pole et al.

On page 3 of the Office Action the Examiner acknowledges that Takizawa:

"...does not teach about lowering the processing ability while keeping the electronic apparatus operative in accordance with a decision from the determination section that the electric power needs to lower the processing ability... Takizawa does not teach different modes of operation with different processing ability depending upon the available charge level determination of unselected battery."

However, on page 3 of the Office Action the Examiner takes the position that Pole et al.:

"...teaches a system and method for managing system's different performance state, which is adapted to transition from a first performance to a lower activity states [C1, C2, C3] in response to the power management event while keeping the electronic apparatus operative and the power management event is generated in response to a change in system's power source [abstract, column 1, lines 36-45; col. 2, lines 1-36; col. 4, lines 24-41; col. 6, lines 15-60; col. 7, lines 1-63]."

In the paragraph spanning pages 3 and 4 of the Office Action the Examiner takes the position that it would have been obvious to combine the teachings of Takizawa et al. and Pole et

al. to modify Takizawa to include a transition to a lower processing ability in response to determination of a low charge level.

The Prior Art

U.S. Patent 5,739,596 to Takizawa et al. is directed to a power supply and a power delivery method for an electronic device such as a portable computer having detachable batteries. Takizawa is directed to a battery driven electronic apparatus having plural main batteries, a back up battery and a power control system, wherein the main battery is used whenever possible to relieve the backup battery (column 1, lines 48-57).

U.S. Patent 6,272,642 to Pole et al. is directed to managing a system's performance state by using a controller adapted to transition a component from a first performance mode to a lower activity state in response to a power management event. The controller is adapted to change a setting of the component to a different performance mode while the component is in the lower activity stage (see abstract). Pole et al. describes examples of the system as including a portable computer, a notebook computer, and a handheld electronic device (column 2, lines 1 and 2).

Pole et al. discloses that depending on the desired power consumption, the system may be set to one of multiple performance states. It is described that if for example, the system is powered by a battery it is placed in a lower performance state to conserve power. Alternatively, if the system is powered by an AC outlet, the system may be placed in a high performance state in which additional heat dissipation devices may be activated (column 2, lines 3-18).

Figure 3 of Pole et al. illustrates the process executed by a power management module such that if the system was originally battery operated and is then plugged into an AC outlet, the system may transition to a higher performance state. Alternatively, if the system is removed from the AC outlet, the system may transition to a lower performance state (column 6, lines 46-60).

The Present Claimed Invention Patentably Distinguishes Over the Prior Art

The present invention is directed to an electronic apparatus such as a notebook or a portable telephone having a plurality of batteries which are detachably mounted thereto. In accordance with the present invention, even if some of the batteries are removed, the apparatus is maintained in an operative state by lowering the processing ability. None of the prior art

teaches or suggests this feature.

The Takizawa reference was cited by the Examiner for its disclosure of an electronic apparatus with more than one battery. As acknowledged by the Examiner, Takizawa does not teach lowering the processing ability by keeping the electronic apparatus operative when one or more of the batteries is to be removed.

The Pole reference is not related to removal of batteries but instead is directed to altering the activity state of the electronic apparatus depending on whether it is being operated by a battery or by an AC outlet. On pages 3 and 4 of the Office Action the Examiner states that it would have been obvious to combine the teachings of Takizawa and Pole to modify Takizawa to include a transition to a lower processing ability. However, the Examiner provides no line of reasoning as to why one of ordinary skill would have been lead to combine these teachings.

In fact, it is submitted that one of ordinary skill would not have been led to combine the teachings of the prior art to achieve the present claimed invention. At most, it is submitted that one of ordinary skill would have been led to modify Takizawa so that it has different activity levels depending on whether the electronic apparatus is plugged into an AC outlet or whether it is operating under battery control.

Referring to claim 1, it is submitted that the prior art does not teach or suggest the claimed electronic apparatus to which a plurality of batteries are detachably mounted which includes:

a removal requirement receipt section receiving a removal requirement for a part of the mounted batteries;

a processing ability determination section responsive to the removal requirement for a battery from said removal requirement receipt section to determine whether a supplying possible electric power from the remaining batteries is an electric power capable of maintaining a processing ability or an electric power which needs to lower the processing ability; and

a processing ability control section for lowering the processing ability while keeping the electronic apparatus operative in accordance with a decision from said processing ability determination section that the electric power needs to lower the

processing ability.

Therefore, it is submitted that claim 1 patentably distinguishes over the prior art.

Claim 2 is directed to an electronic apparatus to which a plurality of batteries are detachably mounted which comprises:

a removal requirement receipt section receiving a removal requirement for a part of the mounted batteries; and

a processing ability control section responsive to the removal requirement for a battery from said removal requirement receipt section to lower a processing ability while keeping the electronic apparatus operative.

Therefore, it is submitted that claim 2 patentably distinguishes over the prior art.

Claim 3 is directed to an electronic apparatus to which a plurality of batteries are detachably mounted which comprises:

a mounting and removal detection section detecting mounting and removal of batteries; and

a processing ability control section responsive to a detection of a removal of a battery by said mounting and removal detection section to lower a processing ability while keeping the electronic apparatus operative.

Therefore, it is submitted that claim 3 patentably distinguishes over the prior art.

Claims 4-24 depend, directly or indirectly from one of the above-described independent claims and include all of the features of the claims from which they depend, plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 4-24 patentably distinguish over the prior art.

Claim 25 is directed to a processing ability alteration instruction apparatus which comprises:

a removal requirement receipt section receiving a removal requirement for a part of the batteries mounted on said electronic apparatus;

a processing ability determination section responsive to the removal requirement for a battery from said removal requirement receipt section to determine whether a supplying possible electric power from the remaining batteries only is an electric power capable of maintaining a processing ability or an electric power which needs to lower the processing ability; and

a processing ability alteration instruction section instructing said electronic apparatus to lower the processing ability while keeping the electronic apparatus operative in accordance with a decision from said processing ability determination section that the electric power needs to lower the processing ability.

Therefore, it is submitted that claim 25 patentably distinguishes over the prior art.

Claim 26 is directed to a processing ability alteration instruction apparatus which comprises:

a removal requirement receipt section receiving a removal requirement for a part of the batteries mounted on said electronic apparatus; and

a processing ability alteration instruction section responsive to the removal requirement for a battery from said removal requirement receipt section to instruct said electronic apparatus to lower the processing ability while keeping the electronic apparatus operative.

Therefore, it is submitted that claim 26 patentably distinguishes over the prior art.

Claim 27 is directed to a processing ability alteration instruction apparatus which comprises:

a mounting and removal detection section detecting mounting and removal of batteries on and from said electronic apparatus; and

a processing ability alteration instruction section responsive to a detection of a removal of a battery by said mounting and removal detection section to instruct said electronic apparatus to lower the processing ability while keeping the electronic apparatus operative.

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Therefore, it is submitted that claim 27 patentably distinguishes over the prior art.

Claims 28-42 depend, directly or indirectly from one of the independent claims and include all of the features of the claim from which it depends, plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 28-42 patentably distinguish over the prior art.

Entry of This Amendment

The amendments being submitted herewith are merely directed to matters of form and do not alter the substance of the claim or narrow the claims within the meaning of Festo Corp. v. Shokestsu Kinzoku Kogyo Kabushiki Co., 122 S.Ct. 1831 (2002), 62 USPQ2d, 1705 (2002). Therefore, it is submitted that these amendments do not require any additional search or undue amount of consideration and it is respectfully requested that these amendments be entered in the application.

Summary

In view of the foregoing amendments and remarks, it is respectfully submitted that each of the claims patentably distinguishes over the prior art, and therefore defines allowable subject matter. A prompt and favorable reconsideration of the rejection along with an indication of allowability of all pending claims are therefore respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

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John C. Garvey

Registration No. 28,607

1201 New York Ave, N.W., Suite 700

Washington, D.C. 20005 Telephone: (202) 434-1500

Facsimile: (202) 434-1501